Copyright (c) 1993 - 2003 Compugen Ltd.

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Title:
Perfect score:
Sequence:
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-Q-/cgn2_1/USPTO_spool/US09934900/runat_23052003_160451_15193/app_query.fasta_1.583
-Q-/cgn2mb1 -QFMT=fastap -SUFFIX-pin.rge -MINANTCH=0.1 -LOOPEXT=0
-DB--GenEmb1 -QFMT=fastap -SUFFIX-pin.rge -MINANTCH=0.1 -LOOPEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX-bilosum62 -TRANS-human40.cdi -LIST=45
-DOCALIGN=200 -THR_SCORE-pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15 -MODE-LOCAL
-OUTFMT=pto -NORM-ext -HEARSIZE=500 -MINLEN=0 -MAXLEN=200000000
-USER-US09934900_eCGN_1_1_2496_erunat_23052003_160451_15193 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
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Listing first 45 summaries
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Maximum DB seq length: 2000000000
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Ygapop 10.0 , Ygapext
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Patent: WO 0216565-A 1 28-FEB-2002;
E. I. du Pont de Nemours and Company
Location/Qualifiers
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
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                                                                               Pont de Nemours and IONAL, INC. (US) Location/Qualiflers
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/db_xref="taxon:32630"
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                                                                                                                                                                                                                                                                                               yThrIleAlaAlaAspGluLysArgHisGluAsnAlaTyrSerArgIleValGluLysLe 282
                                                                                                                                                                                                                                                                                                                                                 AsnThrAlaArgLeuAlaLysGluGlyGlyAspProValLeu----AlaArgLeuCysGl
                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGGACGCGCTTCCCCACTTACCAGACCATGATCAACCATGATGATGGAGTGAAAGATGAC
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GluArgAlaArgLysMetLysLysHisHisGlyValLysPheSerTrpIlePheAsnLys 401
                                          a-GlnAspPhe-ValCysGlyLeuAlaProArgIleArgArgLeuGlnGluArgAlaAsp 381
                                                                                         eLeuValGluArgTrpArgLeuGluLysLeuGluGlyLeuMetAlaGluGlyLysArgAl 362
                                                                                                                              CGCTGTGGCGCAGCGCATAGGCGTGTACACCGCCAACGACTACGCAGACATCTTGGA-TT
                                                                                                                                                                                             eThrMetProAlaHisLeuMetTyrAspGlyAspAspProArgLeuPheGluHisTyrSe
                                                                                                                                                                                                                                                         uLeuGluValAspProThrGlyAlaMetValAlaIleGlyAsnMetMetGluLysLysIl 302
                                                                                                                                                                                                                                                                                                                                                                                        AGACACGGGGATCTGCTCAGAACTTATTTGTATCTCTCTGGGAGGGTTGACATGGCTAAG
                          CCCAGGATTTCCGTGTGGGTTGCCCCCGAGGATTAGGAGGTTCCAAGAACGCGCTGAT 1598
                                                                            TCTCGTTGA-CGGTGAAGATTGGAGAAGCTTGAAGGATTGATGCCTGAGGGGAAGCGGGC
                                                                                                                                         rAlaValAlaGlnArgIleGlyValTyrThrAlaAsnAspTyrAlaAspIleLeuGluPh 342
                                                                                                                                                                                                                                                                                                                                       AGCGGCACGAGCCCGAGCCCGTGGGCCGTGTGGACCCGGGCCTGGACCGCCGAGGAAAAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               differential display Plant Sci. 151 (1), 75-83 (2000)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 (bases 1 to 1470)
Swiderski, M.R., Zabo
Direct Submission
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Swiderski, M.R., Zabo
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                                                                                                                   CysSerSerArgLysAlaHisHisArgHisLeuLeuProProLeuAsnAlaAlaValSer 57
                                                                                                                                                                     AAAAACATGCAGATTCAAACCTGCTACTCTATCAGAATTCAAATTCTTCCT---CTTCCA
                                                                                                                                                                                      LysThrMetGlnIleArgThrCysHisSerIleThrThrGlnThrLeuProGlnLeuPro 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGGCCAGAAGAACTGGCCGCCACAAA---ATGCTGCCACCCATA---GCAGCCATCTCC
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MMQKKITMPAHLMYDGDPKLEDPFSAYAQRMGVYTANDYADILEFLIGRWRLEKVQD
LKDEGKKAQDFVCGLARIRRIQERADERARKMKPHAVKFSWIFNKEIIL"
1 304 c 352 g 383 t
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/transpakiperfyllydamitedalptycymypopopopopstypsopytpdywkal
RDRTABELPERFYVLLYDMITEDALPTYQSMINNLDGYRDETGSSPSPWALWTRAW
EEKRHGDLLRTYLYLSGRVDMKKIEKTVQYLIGSGMDPGTENNPYLGFVYTSFQERAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /product="stearoyl acyl carrier
Lldd3A20"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Lupinus luteus"
/cultivar="Ventus"
/db_xref="taxon:3873"
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/db_xref="GI:4704824"
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AY085086
Arabidopsis thaliana
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                                                                                                                                        LeuGlnGluArgAlaAspGluArgAlaArgLysMetLysLysHisHisGlyValLysPhe
                                                                                                                                                                              AAGGATGAGGGAAAGAAGGCACAGGATTTTGTGTGTGTGGGTTGGCACCGAGGATCAGGAGG
                                                                                                                                                                                                                                                                                      AGTTGTTTGATCACTTCTCTGCGGTGGCGCAGCGAATGGGTGTTTACACGGCCAATGAT
                                                                                                                                                                                                                                                                                                                                                     AsnMetMetGluLysLysIleThrMetProAlaHisLeuMetTyrAspGlyAspAspPro 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ValLeuAlaArgLeuCysGlyThrIleAlaAlaAspGluLysArgHisGluAsnAlaTyr 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgAlaThrPheValAlaHisGlyAsnThrAlaArgLeuAlaLysGluGlyGlyAspPro
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                                                                                                                                                                                                                                                                                                                                                                                              SerargIleValGluLysLeuLeuGluValAspProThrGlyAlaMetValAlaIleGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MetAspProGlyThrAspAsnAsnProTyrLeuGlyPheValTyrThrSerPheGlnGlu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GluGlnCysTrpGlnProGlnAsnPheLeuProAspProSerLeuProHisGluGluPhe
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                                                                                                                        TTGCAAGAGCGTGCTGATGAACGAGCGCGAAAAATGAAACCG--
                                                                                                                                                                                         ArgLeuPheGluHisTyrSerAlaValAlaGlnArgIleGlyValTyrThrAlaAsnAsp 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGCTGGCTCGCATATGCGGGACCATTGCTGCAGAGAAGCGCCACGAGAATGCCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGAGCCACATTTGTGTCACATGGCAACACAGCTCGGCTAGCCAAAGAGGGTGGCGATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGGACCCGGGAACAGAAAACAACCCATATTTGGGATTTGTATACACGTCATTCCAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ValLeuValGlyAspMetValThrGluAspAlaLeuProThrTyrGlnThrMetIleAsn 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerHisGlnValLysGluLeuArgGluArgThrLysGluLeuProAspGluTyrPheVal 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTATTGGTGGGTGACATGATAACAGAGGATGCGCTGCCAACGTACCAGAGCATGATCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACGGATCAGGTGAAGGCCCTCCGTGACCGCACGGCGGAGCTGCCGGAGGAGTACTTCGTG
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 1395 bp mRN clone 12758 mRNA,
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              mRNA
 complete
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  sequence
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                                                                                                                                                              BASE COUNT
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LysThrMetGlnIleArgThrCysHisSerIleThrThrGlnThrLeuProGlnLeuPro

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ACCESSION
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Best Local Similarity:
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Malibu, CA 90265, USA

Malibu, CA 90265, USA

This clone sequence is one of 5,000 Ceres full-length cDNAs made available to TIGR and Genbank. The following quality assessment of this set was done by comparison with known proteins: two percent of the clones are estimated to be 5'-truncated; less than one percent are 3'-truncated; approximately two percent represent alternative splice variants, including unspliced introns and spliced exons; one percent may contain premature stop codons; five percent may have frame shifts in a coding region. A sequence is considered to be 5'-truncated if it lacks the translation initiation start (ATG). A sequence is considered to be 3'-truncated if it lacks the cereminal end of the encoded protein. Please note that these cDNA sequences are derived from the Ws or LAer ecotypes and therefore may contain polymorphisms when compared to sequencing of the full-length clones. Ceres, Inc. carried out the clustering of the full-length clones. Ceres, Inc. carried out the clustering of the consistence, and sequence assembly.
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Brover, V., Troukhan, M.,
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                                                    GCGGATGATTACGCTGACATCTTGGAGTTTTTGGTTGGACGGTGGAGATTGGAGAAGCTA
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Asclepias syriaca.
Asclepias syriaca
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Eukaryota; Viridiplantae; eudicotyledons; core eudicots;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
Asteridae; euasterids I; Gentianales; Apocynaceae; Asclepiadoideae
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Direct Submission
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EENRHGDLKTYLYLSGRVDMTMIDKTIQYLLSGMNTGTINNPYFGFVAIWTSFQEAMTA
EENRHGDLKTYLYLSGRVDMTMIDKTIQYLLSGMNTGTINNPYFGFVAIWTSFQEAMTAIGE
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                                                                                                                        Thunbergia alata
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
Asteridae; euasterids I; Lamiales; Acanthaceae; Thunbergia.
                                                                                                                                                                                                                               U07597
                                                                                                                                                                                                                                           TAU07597 1337 bp mRNA linear PLN 26-JAN-1995
Thunbergia alata clone pTAD2 delta-9 stearoyl-acyl carrier protein
desaturase precursor mRNA, complete cds.
  2 (bases )
Cahoon, E.B.
                                                        Cahoon, E. B., Becker, C.K., Shanklin, J. and Ohlrogge, J.B. CDNAs for isoforms of the delta 9-Stearcyl-acyl carrier protein desaturase from Thunbergia alata endosperm Plant Physiol. 106 (2), 807-808 (1994)
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                                            TTTGATGAACAGGTCAGGGAGCTTCGGCTAAGAACCAAGGAACTACCCGATGAATACTTT
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                                                                                                   GTTGAGAAGTGTTGGCAGCCCAACGACTTTCTTCCCGACCCTTCT-----TCAGAAGGC
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MEVEKLTGLSGEGRNAQEYVCGLAPRIRRLEERAQARAKQGAPVPFSWYYGREVKI"
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FTPPREXKQLTHPMAPEKREIFHSLIGMATERALLSTLLKPVEKCMQPNDFLPDFSSEG
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IWTRAWTABENRHGDLLNKYLYLSGRVDMRQIEKTIQYLIGSGMDPRTDNNPYLGFIY
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/db_xref="GI:533084"
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/db_xref="taxon:32198"
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnollophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzeae; Oryza.
Booth, J.R., Cahoon, R.E., Hitz, W.D., Nucleotide sequences of a new class stearcyl-acp desaturase genes Patent: WO 0216565-A 15 28-FEB-2002; E. I. du Pont de Nemours and Company Location/Qualifiers
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                                                                  ValLeuAlaArgLeuCysGlyThrIleAlaAlaAspGluLysArgHisGluAsnAlaTyr
                                                                                                       ArgAlaThrPheValAlaHisGlyAsnThrAlaArgLeuAlaLysGluGlyGlyAspPro
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Simmondsia chinensis embryo immature seed cDNA to mRNA.
Simmondsia chinensis
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnollophyta; eudicotyledons; core eudicots;
Caryophyllidae; Caryophyllales; Simmondsiaceae; Simmondsia.

1. (bases 1 to 1576)
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Nucleotide sequence of a complementary DNA clone encoding stearoyl-acyl carrier protein desaturase from Simmondsia of Plant Physiol. 99, 362-363 (1992)
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                                /gene="stearoyl-acyl carrier protein desaturase"
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LPDPASEGFMDQVKELRERTKEIPDEYLVVLVGDMITEEALPTYQTMLNTLDGVRDET
LPDPASEGFMDQVKELRERTKEIPDEYLVVLVGDMITEEALPTYQTMLNTLDGVRDET
GASLISWAIWTRAWTAEENRHGDLLNKYLYLIGRVDMKQIEKTIQYLLGSGMDPRSEN
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/gene="stearoyl-acyl carrier 361 c 356 g 406 t
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KLFEIDPDGAVLALADMMRKKVSMPAHLMYDGKDDNLFENYSAVAQQIGVYTAKDYAD
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/tissue_type="immature seed"
/dev_stage="embryo"
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                                                LeuMetTyrAspGlyAspAspProArgLeuPheGluHisTyrSerAlaValAlaGlnArg
                                                                                             GAGAAGCGCCACGAAACTGCCTACACAAAAATTGTCGAAAAGCTCTTTGAAATCGACCCA
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                                TTAATGTATGATGGCAAAGATGACAATCTCTTTGAGAACTACTCAGCCGTCGCTCAACAA
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Thunbergia alata
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
Asteridae; euasterids I; Lamiales; Acanthaceae; Thunbergia.

1 (bases 1 to 1443)
Cahoon F B Booker C K Shankilo I and Obligago I B
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GTILALADMKKKVSMPAHLMEDGKDQNLFEHFSAVAQRIGVYTAKDYADILEYLVAR
WEVEKLTGLTGEGRKAQEYVCGLAPRIRRLDERAQARAKEAAPVPFTWIFGREVRL"
56. 136
137. 1225
                                                                                                                                                                                  /protein_id="aaa61560.1"
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/db_xref="G1:533086"
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/function="oleic acid synthesis"
/standard_name="delta-9-18:0-ACP
/evidence=experimental
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/clone_lib="Lambda ZAPII
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/db_xref="taxon:32198"
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Qy 27 SerIleThrThrGlnThrLeuProGlnLeuProCysSerSerArgLysAlaHis	60.74% Indels: Gaps: 9 x POTSACPD (1-1507)	No.: 9.13e-98 11 Similarity: 75.57% Local Similarity: 62.97%	POLYA.SIGNAI 1423. 1428 BASE COUNT 423 a 293 c 369 g 422 t ORIGIN Alignment scores.	,	KKAFTPPREVHVQVTHSMPPEKIEVFDSLRDWAAQNLLVHLKPVEKCWQPTDFLPDPA SEGFDEQVKELRERCKEIPDDYFVVLIGDMITEBALPTYQTMINTLDGVRDETGATVT PWAIWTRAMTAEENNRHDLLNKYLYLISGRVDMKQIEKTIQYLIGSGMDPRTENNPYLG FVYNSIEKCYPTFVSHGNPAPIAEGRAMKIAOTGSGIA ADERGAETYVEVLIE	/product="stearoyl-acyl carrier protein desaturase" /protein_id="AAA3389.1" /db_xref="GI:169565" /tanslation="MALNINGVSLKSHKMLDFPCSSARSERVFMASTIHRDSVEVGSV	/or 56.	JOURNAL Unpublished (1992) FEATURES Location/Qualifiers source: 1, 1507	Solana Davies a cDNA	Solanum tuberosum cDNA to mRNA. SM Solanum tuberosum Eukaryota; Viridiplantae; Streptophyta; Spermatophyta; Magnoliophyta; eudicotyl	Complete cds. ACCESSION M91238 VERSION M91238.1 GI:169564 KEYWORDS stearoyl-acyl carrier protein desaturase.	RESULT 11 POTSACPD POTSACPD LOCUS POTSACPD 1507 bp mRNA linear PLN 27-APR-199 LOCUS DEFINITION Solanum tuberosum stearoyl-acyl carrier protein desaturase mRNA,	Qy 396 SerTrpIlePheAsnLysGluLeuLeuLeu 405 ::: ::: ::: Db 1196 ACATGGATTTTTGGCCGAGAAGTTCGTCTC 1225	Qy 376 LeuGlnGluArgAlaAspGluArgAlaArgLysMetLysLysHisGlyValLysPhe	Qy 356 MetAlaGluGlyLysArgAlaGlnAspPheValCysGlyLeuAlaProArgIleArgArg	Qy 336 TyralaaspileLeuGluPheLeuValGluArgTrpArgLeuGluLysLeuGluGlyLeu -	Qy 316 ArgLeuPheGluHisTyrSerAlaValAlaGlnArgIleGlyValTyrThrAlaAsnAsp	905 GACATGATGCGGAAGAAAGTGTCGATGCCTGCCCACCTGATGTTTGATGGGAAAGATCAA
4.4 Db	. Qy	OD .	Оу	EIK Db	DPA QY TVT YLG Db	Qy . Db	Qy dd	Оу		оу а; рь	Ду	ω	Qy dd	395 Qy	375 Qy 1144 Db	355 Qy 1084 Db	335 Qy 1024 Db	964 <u>Db</u>
y 369 LeuAlaProArglleArgArgLeuG.InGluArgAlaAspGluArgAlaArgLySMetLyS 388 	349 LeuGluLysLeuGluGlyLeuMetAlaGluGlyLysArgAlaGlnAspPheValCysGly 3 ::: ::: :::	y 329 GlyValTyrThrAlaAsnAspTyrAlaAspIleLeuGluPheLeuValGluArgTrpArg 348 	309 953	y 289 GlyAlaMetValAlaTleGlyAsnMetMetGluLysLysIleThrMetProAlaHisLeu 308 :::::: :::	y 269 LysargHisGluAsnAlaTyrSerArgIleValGluLysLeuLeuGluValAspProThr 288 	y 249 AlaLysGluGlyGlyAspProValLeuAlaArgLeuCysGlyThrIleAlaAlaAspGlu 268 	y 229 ValTyrThrSerPheGlnGluArgAlaThrPheValAlaHisGlyAsnThrAlaArgLeu 248 	y 209 H1STYrLeuILeSerAlaGlyMetAspProGlyThrAspAspAspBroTyrLeuGlyPhe 228 	189 LeuargThrTyrLeuTyrLeuSerGlyargValAspMetAlaLysValGluLysThrVal	169 SerProTrpAlaValTrpThrArgAlaTrpThrAlaGluGluAsnArgHisGlyAspLeu :::	Y 149 ThrTyrGlnThrMetlleAsnAsnLeuAspGlyValLysAspAspSerGlyThrSerPro 168	129 LeuProAspGluTyrPheValValLeuValGlyAspMetValThrGluAspAlaLeuPro ::: :::	Y 109 SerLeuProHisGluGluPheSerHisGlnValLysGluLeuArgGluArgThrLysGlu 128 	89 LeuProLeuLeuLysProValGluGlnCysTrpGlnProGlnAsnPheLeuProAspPro 108	69 MetProProGluLysLysGluIlePheLysSerLeuGluGlyTrpAlaSerGluTrpVal 88	49 LeuProProLeuAsnAlaAlaValSerAlaAlaProPheLysAlaArgLysAlaHisSer 68	45HisArgHisArgHisArg	80 TCGTTAAAATCTCACAAAATGTTACCATTTCCTTGTTCTTCAGCCAGATCTGAGCGAGTT

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Scores:	/ COUCH_SCALL_1 // product_"putative stearcyl-acyl carrier protein // product_"putative stearcyl-acyl carrier protein // protein_1d="AAM64846.1" // protein_1d="AAM64846.1" // db_xref="Gi:21592896" // translation="MAMAMDRIVFSPSSYVYLPCQARGSRSSRVSMASTIRSATTEVT // translation="MAMAMDRIVFSPSSYVYLPCQARGSRSSRVSMASTIRSATTEVT NGRKLYIPPROVHVQNKHSMPPQKLEIFKSLEGWADETLLTYLKPVEKSWQPTDFLEE PESEGFYTQOYKELRERCKELPDDFTVTVLYGDMITTEALTYTYLDGVRDETCAS PTPWAIWTRAWTAEENRHGDLLNKYLYLSGRVDMRQIEKTTQYLIGSGMDPKTENNPY LGFIYTSFQERATFISHGNTARLAKORGDLKLAGJCGTAADERRHETAYTKIVEKLF EIDPDGTIGGLDMMKKKISMPAHLMYDGDDNLFEHFSTYAQRLCYTAKDYADILE EIDPDGTIGGLDMMKKKISMPAHLMYDGDDNLFEHFSTYAQRLCYTAKDYADILE EIDPDGTIGGLDMMKKKISMPAHLMYDGDDNLFEHFSTYAQRLCYTAKDYADILE EIDPDGTIGGLDMMKKKISMPAHLMYDGDDNLFEHFSTYAQRLCYTAKDYADILE FLYERWNVETLTDLSSEGHRAQDFVCGLPARIRKIEERAQGRAKEAAKNIPFSWIFGR NIRA" 467 a 319 G 373 G 492 t		available to TIGR and Genbank. The following quality assessment of this set was done by comparison with known proteins: two percent of the clones are estimated to be 5'-truncated; less than one percent are 3'-truncated; approximately two percent represent alternative splice variants, including unspliced introns and spliced exons; one percent may contain premature stop codons; five percent may have frame shifts in a coding region. A sequence is considered to be 5'-truncated if it lacks the translation initiation start (ATG). A sequence is considered to be 3'-truncated if it lacks the translation initiation start (ATG). A sequence is considered to be 3'-truncated if it lacks the C-terminal end of the encoded protein. Please note that these cDNA sequences are derived from the Ws or LAer ecotypes and therefore may contain polymorphisms when compared to sequences from Col-0. Genset carried out the library production and sequencing of the full-length clones. Ceres, Inc. carried out the clustering of the	Full-Length cDNA from Arabidopsis thaliana Unpublished 3 (bases 1 to 1651) Brover, V., Troukhan, M., Alexandrov, N., Lu, YP., Flavell, R. and Feldmann, K. Direct Submission Submitted (11-MAR-2002) Ceres, Inc, 3007 Malibu Canyon Road, Mallbu, CA 90265, USA This clone sequence is one of 5,000 Ceres full-length cDNAs mad			189 LYSHISHISG.YVAILYSPAGSSTTTPILEPAGASTLYSGULEULEULEU 405 1193TCCGTTCCTTTCAGCTGGATTTTTGGTAAAGAGATTAAGCTG 1234
1080 GTTGCCCAGAGGCTCGGTGTCTACACTGCCAAGGACTATGCTGATATTCTGGAGTTTCTT	Qy 264 IleAlaAlaAspGluLysArgHisGluAsnAlaTyrSerArgIleValGluLysLeuLeu 283	Qy 224 ProfytueuGlyphevalfyfintserpheGligluargalainfphevalalahisGly 243	540 GAAGAAGCACTTCCTACCTACCAGACCATGTTGAACACATTGGATGGTGTAAGGATGAG 164 SerGlyThrSerProSerProTrpAlaValTrpThrArgAlaTrpThrAlaGluGluAsn		Oy 64 ArglysalaHisSerMetProDroGluLysLysGlu1LePheLysSerLeuGluGlyTrp 83	-09-934-900-2 (1-405) x AY087294 (1-1651) 24 ThrCysHisSerIleThrThrGlnThrLeuProGlnLeuProCysSerSerArgLysAla	Score: 1301.00 Matches: 24 Percent Similarity: 77.89% Conservative: 52 Best Local Similarity: 64.21% Mismatches: 64 Query Match: 60.51% Indels: 20 DB: 8 Gaps: 5

Qy 57 SerAlaAlaProPheLysAlaArgLysAlaHisSerMetProProGluLysLysGluIle 76 Db 232 CAAGTA	Qy 15 HisVallleLysThrMetGlnTleArgThrCysHisSerIleThrThrGlnThr 32	BASE COUNT 625 a 447 c 528 g 643 t ORIGIN Alignment Scores:		Qy 344 ValGluArgTrpArgLeuGluLysLeuMetAlaGluGlyLysArgAlaGln 363
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	Qy Qy Db 1 Qy Db 1 Db 1 Db 1	·	0 y	0y 0
RCCSACPD Ricinus communis stearcyl-acyl-carrier protein desaturase mRNA, 3' end of cds. M59857 M59857 M598571 GI:169716 fatty acid synthetase; lipid metabolism; stearcyl-acyl-carrier protein desaturase. Ricinus communis Ricinus communis Ricinus communis Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae; eurosids I; Malpighiales; Euphorbiaceae; Ricinus. 1 (bases I to 1643) Shanklin, J. and Somerville, C. Stearcyl-acyl-carrier-protein desaturase from higher plants is structurally unrelated to the animal and fungal homologs proc. Natl. Acad. Sci. U.S.A. 88 (6), 2510-2514 (1991)	357 AlaGluGlyLysArgAlaGlnAspPheValCysGlyLeuAlaProArgIleArgArgLeu 376	MetMetGluLysLysIleThrMetProAlaHisLeuMetTyrAspGlyAspAspProArg	237 AlaThrPheValAlaHisGlyAsnThrAlaArgLeuAlaLySGluGlyGlyAspProVal 256	157 LeuAspGlyValLysAspAspSerGlyThrSerProSerProTrpAlaValTrpThrArg 176

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PKFYMASTLKSGSKEVENLKKPFMPPREVHVQVTHSMPPQKIELFKSLDNWAEENILV
HLKPVEKCWQPQDFLDDPASDGEDEGVRELRERAKEIDDYFVVLVGDMYTEERALFY
QTMLNTLDGVRDETGASPTSWAIWTRAWTAEENRHGDLLNKYLYLSGRVDMRQIEKTI
QYLIGSGMDPRTENSPYLGFTYTSFQERATFISHGNTARQAKEDDIKLAQIGCTIAA
DEKRHETAYTKIVEKLFEIDPDGTVLAFADMMRKKISMPAHLMENGGRDDNLEDHFSAV
AQRLGVYTAKUYADILEFLYGRWKVDKLTGLSABGQKAQDYVCKLPPRIRRLEERAQG
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Arabidopsis thaliana putative stearoyl-acyl carrier protein
desaturase (At3g02630) mRNA, complete cds.
AY128883.1 GI:22136409
FLI_CDNA.
                                                                                                   Rosidae; eurosids II; Brassicales; Brassicaceae; Arabidopsis.

1 (bases 1 to 1279)

Tripp, M., Southwick, A., Karlin-Neumann, G., Nguyen, M., Miranda, M.,

Palm, C.J., Bowser, L., Jones, T., Banh, J., Carninci, P., Chen, H.,

Cheuk, R., Chung, M.K., Hayashizaki, Y., Ishida, J., Kamiya, A.,

Kawai, J., Kim, C., Lin, J., Liu, S.X., Narusaka, M., Pham, P.K.,

Sakano, H., Sakurai, T., Satou, M., Seki, M., Shinn, P., Yamada, K.,

Shinozaki, K., Ecker, J., Theologis, A. and Davis, R.W.
            The
                                                                                                                                                                                          Arabidopsis thaliana
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
Rosidae; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                    Submitted (01-JUL-2002) DNA Sequencing and 'Stanford University, 855 California Avenue,
                                                                                               Direct Submission
                                                                                                                                                                                                                                                              Arabidopsis thaliana.
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            RIKEN Genomic Sciences Center
                                          for
                                       correspondence: arab@sequence.stanford
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328

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288

834

774

248

228 654

268

1074 348

07-AUG-2002

collection and clustering of RAFL
Arabidopsis Full-Length cDNA'): (GSC) members carried out the cDNAs (RAFL cDNA : 'RIKEN Seki,M., Narusaka,M., Ishida Ishida, J.,

Technology , Palo Alto,

Center, , CA 94304

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BASE COUNT
ORIGIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local
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   295
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The Salk, Stanford, PGEC (SSP) Consortium members constructed sequenced the pUNI (ORF) clones using the RAFL cDNAs: Tripp,M. Nguyen,M., Southwick,A., Karlin-Neumann,G., Lam,B., Miranda,M. Palm,C.J., Bowser,L., Jones,T., Banh,J., Chen,H., Cheuk,R., Chung,M.K., Kim,C., Lin,J., Liu,S.X., Pham,P.K., Sakano,H., Shinn,P., Yamada,K., Ecker,J., Theologis,A. and Davis,R.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               to this work. (SSP/Stanford)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Satou, M., Kamiya, A., Hayashizaki, Y. and
                                                                                                                                               ThrCysHisSerIleThrThrGlnThrLeuProGlnLeuProCysSerSerArgLysAla
                       PheLeuProAspProSerLeuProHisGluGluPheSerHisGlnValLysGluLeuArg
                                                                       GCTGATGAAACCCTGTTGACTTATTTAAAACCTGTTGAGAAATCGTGGCAGCCTACCGAT
                                                                                          AlaSerGluTrpValLeuProLeuLeuLysProValGluGlnCysTrpGlnProGlnAsn
                                                                                                                                                                                                                                                                                                  ACGATTCGCTCTGCGACTACAGAGGTT-----
   TTTCTTCCCGAACCTGAG - - -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                this work.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /protein_id="aam91283:1"
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PTPWAIWTRAWTAEENRHGDLLNKYLYLSGRVDMRQIEKTIQYLIGSGMDPKTENNPY
LGFIYTSFQERATFISHGNYARLAKORGDLKLAQIGGTIAADERRHETAYTKIYEKLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ecotype:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EIDPDGTILGLADMMKKKISMPAHLMYDGQDDNLFEHFSTVAQRLGVYTAKDYADILE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /gene="At3g02630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="At3g02630"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="This clone is in PCR product using RIKEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /chromosome="3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     organism="Arabidopsis thaliana"
/db_xref="taxon:3702"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  306
-TCGGAAGGATTCTATGACCAAGTCAAGGAGCTAAGG
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Matches:
Conservative:
Mismatches:
Indels:
Gaps:
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DB:

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